Catalogue of American Amphibians and Reptiles.

MITCHELL, JOSEPH C. 1982. *Farancia erytrogramma.*

Farancia erytrogramma Palisot de Beauvois Rainbow snake

Coluber erytrogrammus Palisot de Beauvois (*in* Sonnini and Latreille), 1801:88. Type-locality, "L'Amerique septrionale" [="North America"], restricted by Harper (1940) to the "lower Cooper River, in the vicinity of Charleston, S.C." Holotype collected by A. M. F. J. Palisot de Beauvois; presumed lost.
Coluber erythrogrammus: Latreille (*in* Sonnini and Latreille), 1802:141.
Natrix erythrogrammus: Merrem, 1820:117.
Homalopsis erythrogrammus: Boie, 1827:551.
Helicops erythrogrammus: Wagler, 1830:170.
Hydrops erythrogrammus: Gray, 1842:67.
Abastor erythrogrammus: Gray, 1849:78.
Callopisma erythrogramma: Duméril, 1853:454.
Calopisma erythrogrammum: Duméril, Bibron and Duméril, 1854:337.
Abastor erytrogrammus: Harper, 1940:714.
Farancia erytrogramma: Neill, 1964:265.

• CONTENT. Two subspecies are recognized: *erytrogramma* and *seminola.*

• DEFINITION. These are iridescent, stout-bodied snakes (hatchlings 200–220 mm total length, maximum total length about 1676 mm) with smooth scales and 3 red stripes on a black dorsum. The mid-dorsal stripe extends to the base of the tail. The lateral stripe on the 6th scale row extends to the dorsal side of the tail. The lateral coloration below the 6th scale row is usually violet black or slate blue. The venter has 2 primary rows of black spots, usually with a shorter midventral row of black spots; the tail has only 2 rows. The dorsum of the head is black to slate blue with the head scutes edged in red. The venter of the head and the upper and lower labials are yellowish. The lower labials, mentals, and chin shields have centers of dusky slate violet. The yellow color of the gular region extends along scale margins to the second scale row and extends posteriorly, changing to pink or buff. The midventral spots are usually more distinct in males than in females. The anal plate is usually divided, but may be single in some northern populations. There are two internasals and seven infralabials. The posteriodorsal scales may be slightly keeled. The body shape is cylindrical with no difference in the width of the head and neck. The tail has a sharp spine.

• DESCRIPTIONS. All published descriptions, except that of Neill (1964), who described *F. e. seminola*, refer to the nominate subspecies. Descriptions of color, pattern and/or scutellation are found in Holbrook (1838), Garman (1892), Cope (1900), Ditmars (1907, 1936, 1939), Carr (1940), Schmidt and Davis (1941), Wright and Wright (1957), Neill (1964), Cochran and Goin (1970), Leviton (1972), Jensen (1974), Conant (1975), Mount (1975), Linzey (1979), and Behler and King (1979). Sexual dimorphism was discussed by Blanchard (1931), Richmond (1954) and Neill (1960). Meristic and mensural variation of juveniles and adults was presented in Cope (1900), Richmond and Goin (1938) and Richmond (1954). Cope (1900) described the hemipenes. The karyotype has not been described.

• ILLUSTRATIONS. Schematic drawings of the head, a body section, anal region and hemipenes are in Cope (1900) and of the head in Conant and Bridges (1939), Schmidt and Davis (1941) and Wright and Wright (1957). Black and white photos of adults and/or hatchlings appear in Ditmars (1907, 1936, 1939), Wright and Wright (1957), Breen (1974), and Mount (1975) and color photos or plates in Holbrook (1838, 1842), Schmidt and Davis (1941), Cochran (1954), Cochran and Goin (1970), Harrison (1971), Leviton (1972), Mitchell (1974), Conant (1975), Gans (1975), Linzey (1979) and Behler and King (1979). A photo of a sectioned Duvernoy's gland appears in Taub (1967). Neill (1964) illustrated the species' distribution, ventral pattern of both sexes of the nominate subspecies, the dorsum and venter of the type specimen of *F. e. seminola*, and the optimum habitat and eggs of *F. e. erytrogramma.*

• DISTRIBUTION. The nominate subspecies ranges from Charles County, Maryland south to Marion County, Florida, and west to southern Mississippi and southeastern Louisiana. There is an outlying record in Pinellas Co., Florida. *F. e. seminola* is known only from Glades Co., Florida. Other significant locality records after Neill (1964) are in Mount (1975) for Alabama and Witt (1964) for Virginia. Unconfirmed literature records exist for central Mississippi (Cliburn, 1959).

This fossorial species occurs in and near coastal plain rivers, streams, swamps, springs, open marshes and sandy fields. See Neill (1964) for a photograph of the preferred habitat.

• FOSSIL RECORD. See generic account.

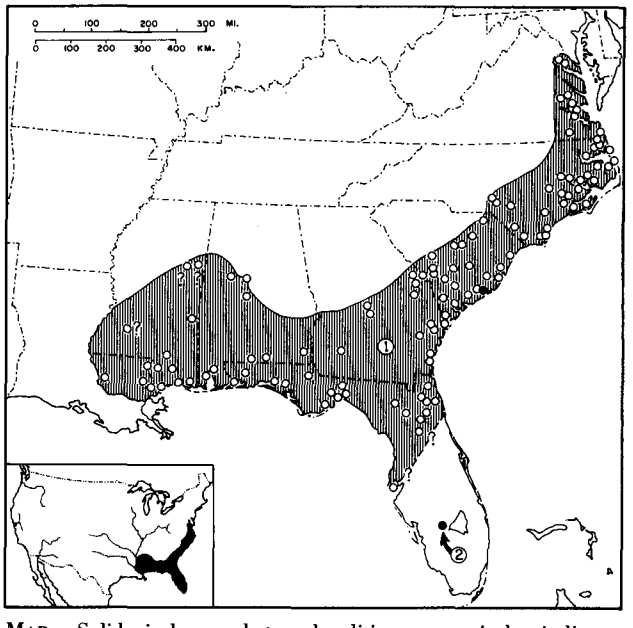
• PERTINENT LITERATURE. Neill's (1964) paper contains references to earlier relevant literature and discussions of taxonomy, geographic variation in color and pattern, and natural history. Sanders (1966), Fitch (1970), Musick (1972), Jensen (1974), Mitchell (1974), Mount (1975), Gibbons (1977), Gibbons and Patterson (1978), Iverson (1978) and Behler and King (1979) published recent accounts of habitat preference, behavior, food, and/or reproduction. Metrolis (1971) described feeding behavior. Gibbons et al. (1977) published a study of sexual dimorphism and life history attributes. Neill (1964) provided an account of the taxonomic history and orthography of the name *erytrogramma.* See generic account for additional references.

• REMARKS. *Farancia erytrogramma seminola* Neill was described from 3 female specimens; however, only the holotype is currently known to exist. Additional specimens have been extensively sought but without success (R. W. McDiarmid and L. D. Wilson, personal communications).

• ETYMOLOGY. The specific name *erytrogramma* is derived from the Greek *erythro* meaning "red" and *gramma* meaning "writing," presumably in reference to the distribution of black pigment around the red scales and the longitudinal red stripes. The gender is feminine. The subspecific name *seminola* alludes to the area of Florida frequented by the Seminole Indians and to the type locality (Fisheating Creek) named by them.

1. *Farancia erytrogramma erytrogramma* (Palisot de Beauvois)

Coluber erythrogrammus, Palisot de Beauvois (*in* Sonnini and Latrielle), 1801:88. See species account.
Farancia erytrogramma erytrogramma Neill, 1964:265.



MAP. Solid circles mark type-localities; open circles indicate other records. Question marks indicate unverified records and uncertain range boundary.

• DEFINITION. A subspecies with predominantly red or pink pigment on ventral scutes with black pigment restricted to a lateral row and a short midventral row of spots. Subcaudal scutes black-spotted, red pigment not restricted to borders around spots. Dorsal scale row I is without black, II with less than ¼ black per scale and III with less than ¾ black per scale. The lateral red stripe is not encroached by black.

2. *Farancia erytrogramma seminola* Neill

Farancia erytrogramma seminola Neill 1964:270. Type-locality, "Fisheating Creek, about 1 mile S Palmdale, Glades County, Florida." Holotype, Florida St. Mus. 19419, adult female, collected 13 September 1952 by W. T. Neill (not examined by author).

• DEFINITION. A subspecies with predominantly black ventral (except toward the throat) and subcaudal scutes. Subcaudal red is reduced to narrow borders around large black spots. Scales of row I and II are half black or more and scales of row III are all black. The lateral red stripe has dentate edges, from encroaching black pigment.

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Primary editor for this account, Larry David Wilson.

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